
PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Restore Anadromous Fish Habitat In The Nichols Canyon Subwatershed

BPA project number: 9901500

Contract renewal date (mm/yyyy): 1/2000

☐ Multiple actions?

Business name of agency, institution or organization requesting funding

Clearwater Focus Watershed Program - Idaho Soil Conservation Commission

Business acronym (if appropriate) ISCC

Proposal contact person or principal investigator:

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NPPC Program Measure Number(s) which this project addresses

4.1 Salmon and Steelhead Goal, 7.6 Habitat Goal, Policies, and Objectives, 7.7 Cooperative Habitat Protection and Improvement with Private landowners.

FWS/NMFS Biological Opinion Number(s) which this project addresses

Other planning document references

1) CBFWA. (1990). Clearwater River subbasin salmon and steelhead production plan. p 185 (component of CBFWA's plans that were compiled for the Integrated System Plan. 2) CRITFC. (1995). Wy-Kan-Ush-Mi Wa-Kish-Wit vol. II. p106. 3) IDFG. Anadromous fish management plan 1996-2000. p 96. 4) Idaho DEQ and Idaho SCC. (1991). Idaho agricultural pollution abatement plan. p. VI-6. 5) NPPC (Independent Science Group). (1996). Return to the river. p. 354. 6) Nez Perce Soil and Water Conservation District 5-year resource conservation plan 1999-2003. Nine of twelve priorities. 7) Nez Perce Soil and Water Conservation District. (1995). Big Canyon Creek environmental assessment: final plan. Assessment process included public and agency review. 8) NMFS (1995). Proposed recovery plan for Snake River salmon. Task No. 1.4.

Short description

Restore steelhead trout habitat in the Nichols Canyon subwatershed affected by upland agricultural land uses by implementing agricultural best management practices and coordinating ISCC, NRCS, and BPA funding sources.

Target species

Oncorhynchus mykiss

Section 2. Sorting and evaluation

Subbasin
Clearwater

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
<input checked="" type="checkbox"/> Anadromous fish <input type="checkbox"/> Resident fish <input type="checkbox"/> Wildlife	<input type="checkbox"/> Multi-year (milestone-based evaluation) <input checked="" type="checkbox"/> Watershed project evaluation	<input checked="" type="checkbox"/> Watershed councils/model watersheds <input type="checkbox"/> Information dissemination <input type="checkbox"/> Operation & maintenance <input type="checkbox"/> New construction <input type="checkbox"/> Research & monitoring <input checked="" type="checkbox"/> Implementation & management <input type="checkbox"/> Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description
9608600	Clearwater Subbasin Focus Watershed Program - ISCC
9901400	Restore Anadromous Fish Habitat in the Little Canyon Creek Subwatershed
9901500	Restore Anadromous Fish Habitat in the Nichols Canyon Subwatershed

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
9901600	Protecting and Restoring Big Canyon Creek Watershed	Nez Perce Tribe Focus Program in Clearwater has a BPA project in the upper subwatershed of Big Canyon
9011	Characterize & Quantify Residual Steelhead in Clearwater River, Idaho	USFWS research project in mainstem and tributaries

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?
	Implementation of Fiscal Year 1999 will begin later in the fiscal year.	Project monitoring has not been implemented.

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Project Participation Enrollment and Project Selection	a	Public meeting to describe project and review work accomplished in Fiscal Year 1999
		b	Assist with the application process.
		c	Assess FY99 application process for effectiveness; amend where needed for Fiscal Year 2000.
		d	Evaluate, score, and rank project applications for FY 2000 field season.
2	Best Management Practices Implementation Preparation	a	Prepare layout work, coordinate required surveys, and ESA and NEPA documentation. Prepare project documentation.
		b	Develop list of and select needed construction contractors and material suppliers.
		c	Schedule individual project components for construction season.
3	Best Management Practices Implementation	a	Conduct and document project implementation inspections.
		b	Provide project management functions.
4	Monitoring	a	Compile monitoring data from participating agencies: BLM, IASCD, IDFG, NPT, USFWS.
		b	Photo points survey
		c	Prepare comparative review of monitoring data at end of project year
5	Project Progress Documentation	a	Prepare four quarterly status reports and a summary report of project.

Objective schedules and costs

Obj #	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	1/2000	3/2000			5.00%
2	3/2000	11/2001			15.00%
3	8/2000	12/2000	sediment, water qual., riparian areas, bank stab. FWP sec 7.6d		76.00%
4	5/2000	12/2000			2.00%
5	3/2000	12/2000			2.00%
				Total	100.00%

Schedule constraints

1) Time needed to comply with NMFS consultation requirements to comply with ESA and NEPA, 2) Subcontractor availability, 3) Extreme precipitation during implementation phase (August through November) that may affect access to project areas.

Completion date
FY2003

Section 5. Budget

FY99 project budget (BPA obligated): \$181,755

FY2000 budget by line item

Item	Note	% of total	FY2000
Personnel	1FTE Conservationist; 0.25 tech.	% 19	40,404
Fringe benefits	@ 33%	% 6	13,333
Supplies, materials, non-expendable property		% 1	2,500
Operations & maintenance	Vehicle Costs - insurance, fuel, etc.	% 1	2,000
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		% 0	
NEPA costs		% 0	1,000
Construction-related support		% 0	
PIT tags	# of tags:	% 0	
Travel		% 0	1,000
Indirect costs	@ 10%	% 3	6,000
Subcontractor		% 69	145,000
Other		% 0	
TOTAL BPA FY2000 BUDGET REQUEST			\$211,237

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
BLM	Water quality monitoring	% 1	4,225
IASCD	Water quality monitoring	% 1	4,225
DEQ/ISCC	SAWQP upper watershed	% 50	218,801
		% 0	
		% 0	
		% 0	
Total project cost (including BPA portion)			\$438,488

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	\$200,000	\$200,000	\$200,000	

Section 6. References

Watershed?	Reference
<input type="checkbox"/>	Bjornn, T.C. and Reiser, D.W. in Meehan, William (ed). 1991. Influences of forest and

	rangeland management on salmonid fishes and their habitats.
<input checked="" type="checkbox"/>	Bonneville Power Administration. 1997. Watershed management program: final environmental impact statement.
<input checked="" type="checkbox"/>	CBFWA. 1990. Clearwater River subbasin salmon and steelhead production plan.
<input checked="" type="checkbox"/>	Columbia River Inter-Tribal Fish Commission. 1995. Wy-Kan-Ush-Mi Wa-Kish-Wit, Volume II.
<input type="checkbox"/>	Fuller, R.K., Kucera, P.A., and Johnson, D.B. 1985. A biological and physical inventory of the streams within the Nez Perce Reservation. DOE/BP DE-A179-83BP10068, BPA, Portland.
<input type="checkbox"/>	Gilmore, Shelly. 1995. BMP effectiveness review.
<input checked="" type="checkbox"/>	Idaho Fish and Game Department. Anadromous fish management plan 1996-2000.
<input checked="" type="checkbox"/>	Idaho Department of Environmental Quality and Idaho Soil Conservation Commission. 1991. Idaho agricultural pollution abatement plan.
<input type="checkbox"/>	Idaho Division of Environmental Quality and U.S. Environmental Protection Agency. 1997. Idaho TMDL development schedule: EPA review and evaluation.
<input checked="" type="checkbox"/>	Independent Science Group (NPPC). 1996. Return to the river.
<input type="checkbox"/>	Kucera, P.A. and Johnson, D.B. 1986. A biological and physical inventory of the streams within the Nez Perce Reservation. DOE/BP DE-A179-83BP10068, BPA, Portland
<input type="checkbox"/>	Murphy and Metsker. 1962. Inventory of Idaho streams containing anadromous fish and steelhead with recommendations for improving.
<input type="checkbox"/>	Nez Perce Soil and Water Conservation District 5-year plan. 1998
<input checked="" type="checkbox"/>	Nez Perce Soil and Water Conservation District and the U.S. Natural Resources Conservation Service. 1995. Big Canyon Creek environmental assessment final planning report.
<input checked="" type="checkbox"/>	Nez Perce Tribe and Idaho Department of Fish and Game. 1990. Clearwater River subbasin salmon and steelhead production plan. BPA contract.
<input checked="" type="checkbox"/>	National Marine Fisheries Service. 1995. Proposed recovery plan for Snake River salmon.
<input type="checkbox"/>	Northwest Power Planning Council. 1994. Columbia River Basin Fish and Wildlife Program.
<input type="checkbox"/>	Schnepf, C. and Hasselstrom, K. 1995. Idaho soil conservation districts supervisors' handbook.
<input type="checkbox"/>	U.S. Bureau of Land Management (DOI). 1993. Riparian area management: greenline riparian-wetland monitoring. Technical reference 1737-8.
<input type="checkbox"/>	U.S. Natural Resources Conservation Service (USDA). 1996. Field office technical guide, volume IV.

PART II - NARRATIVE

Section 7. Abstract

The presence of steelhead trout in the Big Canyon Creek watershed have been documented by Murphy and Metsker, 1962, Fuller, Kucera, and Johnson, 1985, Kucera and Johnson, 1986, and the U.S. Fish and Wildlife Service and Nez Perce Tribe, 1995 and 1997. Fuller et al noted that fish habitat was impacted by low summer stream flow, lack of instream cover, nitrate problems, and siltation. The Idaho State 1996 Section 303(d) stream list indicates water quality has been impacted by habitat alteration, bacteria, nutrients, flow alteration, sediment, and temperature. Steelhead trout were federally listed as a threatened species in the Snake River Basin on October 17, 1997.

The predominant land use in the watershed is agriculture occurring on previously timbered forest soils. The purpose of this project is to improve fisheries habitat by decreasing nonpoint source pollution, restoring riparian areas, and increasing water retention in the upper watershed by implementing NRCS, BPA, and Idaho State approved agricultural Best Management Practices in the Nichols Canyon subwatershed of the Big Canyon Creek watershed.

This proposal is for the second year of a five year project in the Nichols Canyon subwatershed and directly implements Sections 4.1, 7.6, and 7.7 of the Columbia River Basin Fish and Wildlife Plan. A positive trend toward improved habitat conditions is expected and will be assessed by monitoring water quality through the cooperative efforts of the Bureau of Land Management and the Idaho Association of Soil and Water Conservation Districts, and fish survey monitoring in cooperation with Idaho Department of Fish and Game.

Section 8. Project description

a. Technical and/or scientific background

This proposal requests funds to continue BPA funded implementation of agricultural Best Management Practices (BMPs) in the Big Canyon Creek watershed. The Big Canyon Creek watershed is divided into three subwatersheds: Sixmile-Posthole Canyon (46,000 acres), Cold Springs (15,000 acres), and Nichols Canyon (24,000 acres). This proposal is specifically for the Nichols Canyon subwatershed. BMP implementation will contribute toward the watershed goal to restore steelhead trout habitat by reducing nonpoint pollutants to the watershed, repair poorly functioning riparian zones, and increase water retention in the upper watershed. The project sponsor is the Nez Perce Soil and Water Conservation District; the project is coordinated through the Clearwater Focus program..

Big Canyon Creek is a tributary of the lower mainstem Clearwater River. The watershed is located in Nez Perce and Lewis Counties, Idaho as Big Canyon Creek forms a common boundary with the two. The Nichols Canyon subwatershed is mostly located in Nez Perce County. The creek headwaters in the Camas Prairie at an elevation of approximately 4,224 feet and flows in a northerly direction for 30 miles to the confluence with the Clearwater River at an elevation of approximately 825 feet. Big Canyon Creek flows through a deep and steep sided canyon that is relatively inaccessible, with stream gradients ranging from 0.5 to 4.5 percent. Streams and intermittent tributaries flow into Big Canyon Creek throughout its length. Little Canyon Creek subwatershed (BPA project no. 9901400) enters Big Canyon Creek downstream from the Nichols Canyon subwatershed boundary.

Historically, many of the tributaries of the lower Clearwater River supported substantial populations of anadromous salmonids, primarily steelhead. (Fuller, et al 1985) The presence of steelhead trout in Big Canyon Creek was first documented in Murphy and Metsker (1962). Sampling of overyearling rainbow-steelhead trout was documented in Fuller, Kucera, and Johnson, "The five highest densities of overyearling rainbow-steelhead were found in Little Canyon, Cottonwood, Big Canyon, Middle Fork Potlatch, Little Boulder, and Jacks Creeks." (1985, p5). Kucera and Johnson reported, "The Big Canyon Creek system currently is one of the top steelhead producing streams within the Nez Perce Reservation." (1986, p156). The U.S. Fish and Wildlife Service and the Nez Perce Tribe (USFWS/NPT) have been investigating the interactions between hatchery (B-run) and A-run steelhead in the Clearwater River since 1994. Electrophoretic analysis, completed by the National Marine Fisheries Service, has suggested that steelhead sampled from Big Canyon Creek thus far are dissimilar from Dworshak National Fish Hatchery steelhead and have little, if any, genetic influence from stray hatchery fish. (Waples 1995) The report for 1995 field season sampling by USFWS/NPT, indicates that overall, average mid-summer densities of subyearling and yearling steelhead were lower than densities observed in the early 1980s by Kucera and Johnson (1986).

The following information comes from the Big Canyon environmental assessment: final planning report (Nez Perce SWCD, 1995).

- 1) Land uses in the Nichols Canyon subwatershed are predominately agricultural and include cropland (12,000 acres), rangeland (10,000 acres), and forestland (2,000 acres).
- 2) Cropland occurs on slopes varying from 0 to 25% in previously timbered soils on the Camas Prairie.
- 3) Rangeland occurs on the canyon bottom and on the steep canyon walls. Cattle grazing activity is moderate to heavy throughout the stream length.

- 4) Forestland is mostly on very steep northeast facing canyon slopes with scattered timber stands on the canyon floor and interspersed throughout the cropland. Approximately 50% of the timber stand was logged between 1994 and 1996.

Riparian vegetation is generally sparse consisting of scattered deciduous trees. Flood damage has resulted in localized severe degradation of fish habitat and the stream has been channelized in the lower section of the Nichols Canyon subwatershed (Kucera and Johnson, 1986).

Fuller et al reported the following problems in the Big Canyon Creek watershed: low summer stream flow, high summer temperatures, low instream cover, annual stream flow variation (1985). The 1993 Idaho Agricultural Pollution Abatement Plan identified the Big Canyon Creek watershed as a *nonpoint source water quality priority*. (pVI-6) The Idaho State 1996 Section 303(d) stream list includes Big Canyon Creek with the following parameters of concern: sediment, nutrients, thermal modification, flow, and habitat alterations (DEQ and EPA, 1997). Kucera and Johnson reported that juvenile steelhead trout populations appeared to be limited by lack of yearling habitat: stream depth greater than 30 cm, undercut banks, surface turbulence, submerged rock and debris, and overhanging vegetation. (1986)

Land use management has contributed significantly to water quality and fisheries habitat degradation in Big Canyon Creek. The Nez Perce Soil and Water Conservation district identified sources of pollutants to the creek and reported them in, the Big Canyon Creek Environmental Assessment: Final Planning Report. "Many of the pollutants contributing to the water quality problems in Big Canyon Creek originate from agricultural sources, forestry sources, urban sources, and grazing activities in riparian areas adjacent to cropland, pastureland, rangeland, and forestland." (1995, p28) Big Canyon Creek has high flows of short duration during spring runoff and intensive precipitation periods, and very low stream flows during the dry summer and fall periods. Harvest of upper prairie and canyon timber has decreased the capability to retain water in the watershed increasing susceptibility to flooding and stream morphology modification (Kucera and Johnson, 1986 and Nez Perce SWCD, 1995). Subsequent widening of the stream channel and erosion of banks have impacted riparian zones and decreased the ability to filter pollutants and provide shade and large woody debris to the stream. Enlarged channels and diminished streamflow have affected the availability and diversity of fish habitat. The decreased capability to retain water in the watershed has affected groundwater recharge to the system and in conjunction with decreased vegetative shading, has increased water temperatures. Croplands, unstable stream banks, and areas affected by livestock grazing contribute sediment to the system.

Inter-Fluve, Inc (Bozeman, MT) evaluated the relationship between ground and surface water for the Bureau of Land Management in the Sixmile subwatershed (upstream from the Nichols Canyon subwatershed). They suggested that habitat restoration work would be best if prioritized in the Nichols Canyon subwatershed where perennial flow and steelhead are frequently observed. (In, Nez Perce SWCD, Appendix L, 1995). BLM does not manage lands in the Nichols Canyon subwatershed.

The goal of the proposed program is to reduce nonpoint pollution by continuing implementation of NRCS approved agricultural Best Management Practices (BMPs). Standards and specifications for these BMPs are given in the U.S. Natural Resources Conservation Service's, *Field Office Technical Guide, Volume IV*. These BMPs are also endorsed by the Bonneville Power Administration (BPA) in the programmatic final environmental impact statement (EIS) for the Watershed Management Program and the Idaho State Agricultural Pollution Abatement Plan.

The Fiscal Year 2000 Nichols Canyon subwatershed project will be sponsored by the Nez Perce Soil and Water Conservation District. **Refer to the Clearwater Focus Program (BPA Project No. 9608600) umbrella proposal, Section 8(a) for more information.**

b. Rationale and significance to Regional Programs

Refer to the Clearwater Focus Program (BPA Project No. 9608600) umbrella proposal for this discussion.

c. Relationships to other projects

Refer to the Clearwater Focus Program (BPA Project No. 9608600) umbrella proposal for this discussion.

d. Project history (for ongoing projects)

The first BPA contract for the Nichols Canyon subwatershed of the Big Canyon Creek watershed was approved for Fiscal Year 1999. The contract (BPA No. 99-015-00) will be initiated in January 1999 for field implementation in the third and fourth quarters of FY1999.

e. Proposal objectives

The goal of this project is to restore steelhead trout habitat by reducing nonpoint pollutants into the Nichols Canyon subwatershed of the Big Canyon Creek watershed, repair poorly functioning riparian zones, and increase water retention in the upper portions of the watershed to reduce the erratic flow regime that currently exists. The expected cumulative effect from work accomplished throughout the term of this project should result in achievement of the FWP's habitat objectives (Section 7.6D). Best Management Practices (BMPs) endorsed by the Natural Resources Conservation Service (NRCS), Bonneville Power Administration (BPA), and Idaho Agricultural Pollution Abatement Plan will be implemented on lands to achieve this goal. This project complements other state and federal watershed activities ongoing in the upper watershed.

Objective 1 – Project participation enrollment and project selection Organize a public meeting to solicit interest and prepare applications for landowner participation in the Nichols Canyon subwatershed project. To maximize resources and personnel, best management practices were planned for implementation over a five year period; Fiscal Year 2000 is the second. Applications will be scored, ranked, and selected for implementation. Outcome: Six-ten landowner applications processed and approved for action. The range for outcome reflects the potential range in number and cost for BMPs approved per application.

Objective 2 – Best Management Practices Implementation Preparation Prepare for field season activities selected during Objective 1. Final BMP design work will be performed where needed, cultural resource and engineering surveys conducted. Scheduling and logistics will be finalized; contractors and suppliers will be selected. Outcome: Final design plans on file for each BMP approved in Objective 1, a list of approved contractors and suppliers.

Objective 3 – Best Management Practices Implementation Implement BMP activities. Project management functions and implementation inspections will be regularly conducted and documented. Outcome: Documentation of at least two on-site inspections per BMP implemented. (Implementation monitoring and assessment)

Objective 4 - Monitoring Compile all existing monitoring data and assist other agency personnel with monitoring where needed. Outcome: Reference document to establish baseline conditions.

Objective 5 – Project Progress Documentation Document project progress and results. Outcome: Four quarterly status reports and one annual summary report.

f. Methods

Scope Removal of timber from the Camas Prairie, steep canyon slopes, and riparian areas of the watershed has significantly impacted water retention and annual flow in Big Canyon Creek. Subsequent agricultural practices on the upper prairie soils has precluded revegetation and contributed sediment to the system. Water quality and fisheries habitat degradation has occurred and over time the

effects have been cumulative. Analysis of the entire watershed was completed in 1995 and action implemented in the upper two watersheds through an Idaho State Soil and Water Quality Program (SAWQP). To complement the upper SAWQP, the lower Nichols Canyon subwatershed is the focus of a similar treatment regime through BPA funding beginning Fiscal Year 1999 (Project No. 9901500). This proposal is for continuation of the Nichols Canyon subwatershed treatment project.

Habitat restoration in the upper reaches of the Clearwater River subbasin will not affect the work proposed here. The Big Canyon Creek watershed is a tributary to the lower Clearwater mainstem and is not affected directly by watersheds draining the Clearwater Mountains of the Bitterroot Range.

Approach This proposal for treatment of the Nichols Canyon subwatershed is part of an overall Big Canyon Creek watershed program that involves local, state, tribal, and federal actions. The object is to mitigate the effects from land uses in the upper watershed to facilitate the restoration of natural physical processes in the riparian and stream zones. The project is based on the original watershed planning process which included some prioritizations that are not appropriate for BPA funding. To account for this and the five year project schedule, specific sites for BMPs are not predefined for each Fiscal Year. Instead, each project year will begin with a recruitment meeting and projects selected based on SWCD priorities relative to fish habitat restoration. Finally, enrollment in the program will vary each year relative to crop rotation phase, land operator changes, and economics.

Assumptions

1. Revegetation of the Camas Prairie to its former land cover is not possible. However, it is assumed that mitigating the effects of current land uses on the present land cover will contribute significantly to improvement of riparian and stream processes thereby moving toward restoration of fisheries habitat.
2. Restoration of natural physical processes in the watershed and subsequent restoration of fisheries habitat will be a gradual process and will not be fully achieved until after BPA project funds have been expended. However, it is assumed that a positive trend toward this goal can be established through monitoring before completion of BPA funded treatments.
3. Private landownership accounts for approximately 33% of the Clearwater River subbasin. Fiscal Year 1999 was the first year that BPA funds were used for habitat restoration on private lands in the Clearwater River subbasin. It is assumed that restoration and impact mitigation work will result in improved fisheries habitat and water quality and, as conservation demonstrations encourage other work throughout the subbasin.

Methodology Overview An agricultural BMP is defined as a practice that can most effectively and practicably prevent or reduce the amount of pollution generated by nonpoint sources. (Gilmore, 1995) Agricultural BMPs are classified as cultural, structural, or management. Cultural practices include or example, conservation tillage, crop rotation, contour farming, and permanent vegetative cover. Structural practices for example include, terraces, water and sediment control basins, riparian plantings, filter strips, and grassed waterways. Cultural and structural practices decrease runoff and reduce soil erosion. Management practices designed for fertilizer, pesticide, and livestock waste application systems, are intended to increase the efficiency of these systems and reduce nonpoint pollutants from excessive or inappropriate application.

All of the BMPs proposed for Fiscal Year 2000 will be placed in upland areas; none are instream structures or treatments.

Objective 1: Project Participation Enrollment and Project Selection

Task a: The Nez Perce Soil and Water Conservation District will host a public meeting for the Fiscal Year 2000 project sign-up. The Nez Perce SWCD board of supervisors will be directly involved in planning and presenting the program. Background information and an overview of the Fiscal Year 1999 activities will be presented. Any modifications to project priorities from the Fiscal Year 1999

program will be announced and explained. This kind of district sponsored community event has a history of success in the Clearwater River subbasin and offers a good venue for past participants, technical specialists, agency representatives, and interested individuals to participate. Because of the original project planning process and the Fiscal Year 1999 public meeting, familiarity with this program will be high.

Task b: Provide assistance with applications for the Fiscal Year 2000 project period sign up during the public meeting. Depending on modifications to priorities based on Fiscal Year 1999 activities, assistance will be organized as a workshop or individual consultation.

Task c: Assess the Fiscal Year 1999 project implementation to revise application and prioritization process for Fiscal Year 2000 projects. The Fiscal Year 1999 application was scored with variable points given to attributes of BMPs to be implemented. Point distribution was weighted depending on specific BMP and location within the subwatershed. Develop a survey to interview Fiscal Year 1999 participants and technical advisory team for amendment suggestions. Amend application form to reflect revisions.

Task d: Evaluate and score applications. If project requests exceed funding, rank applications for selection. Scoring will reflect BMP prioritizations designated by the SWCD board of supervisors. Review of the Fiscal Year 1999 program may result in modification to the Fiscal Year 2000 program.

Objective 2: Best Management Practices Implementation Preparation

Task a: In conjunction with the Clearwater Focus Program, BPA, National Marine Fisheries, and NRCS participate in NEPA and ESA review, assessment, and documentation requirements. Coordinate and schedule survey work needed prior to BMP implementation: land survey, slope staking, cultural resource survey. Document project progress and maintain file reporting system.

Task b: Develop lists of available and qualified contractors and suppliers for BMPs implementation including but not limited to: equipment owners/operators, certified engineers, planting crews and/or volunteer organizations interested in watershed restoration, risers, and suppliers of field tile, seed, trees/shrubs/forbes.

Task c: Complete design of BMP project implementation logistics and schedule contractors and monitoring inspections.

Objective 3: Best Management Practices Implementation.

Task a: Conduct at least two implementation inspections for each BMP to confirm compliance with NEPA and ESA conditions, BMP technical specifications, and to evaluate timely progression of activities. Use documentation protocol established in FY1999 or amend that procedure with explanation for the file. Establish photo points to document annual BMP condition. Maintenance of BMPs are the responsibility of landowners and will be annually inspected.

Task b: Initiate and document subcontracts for BMP implementation. Use documentation protocol established in FY1999 or amend procedure with explanation for the file. Perform functions of general project manager for all BMP implementation sites. including but not limited to: resolving contractor scheduling conflicts, locate alternative supplier sources when needed, modify implementation schedule in response to interrupted or prevented field access, maintain regular status reports to SWCD board and Clearwater Focus Co-coordinator.

Objective 4: Monitoring

Implementation monitoring is discussed in Objective 3 Task a.

Task a: Continue (from FY1999) compilation of effectiveness monitoring

data from other agencies into a single reference and assist Bureau of Land Management, Idaho Department of Fish and Game, Idaho Soil Conservation Commission, and U.S. Fish and Wildlife Service with monitoring where needed. The BLM has one monitoring station at the lower end of the Nichols Canyon subwatershed where water quality parameters are measured: pH, conductivity, air and water temperature, dissolved oxygen, stream discharge, and turbidity. The IASCD and Clearwater Focus Program will operate a station at the upper portion of the subwatershed measuring the same parameters. Information will be collected from the USFWS/NPT project and any data generated from project work in the upper two watersheds.

Task b: Although a schedule has not been confirmed at this writing, a riparian functions survey is tentatively planned for the Nichols Canyon Creek subwatershed for late in Fiscal Year 1999. The survey will be lead by the Idaho Soil Conservation Commission's riparian specialist and will be a coordinated effort involving several different state and federal agencies, interested individuals, and the Nez Perce Tribe. During Fiscal Year 2000, photos will be taken at photo points established in the Fiscal Year 1999 survey. Fish survey work is planned in Fiscal Year 1999, although is not yet scheduled at this writing.

Task c: Prepare an annual summary review of monitoring data.

Objective 5: Project Progress Documentation

Task a: Four quarterly status reports will be prepared to document progress, discuss any complications that arose throughout the quarter, and project the next quarter's schedule and anticipated achievements. The quarterly reports will be submitted to the BPA COTR for the project and the Clearwater Focus Co-coordinator. A summary report will be prepared at the conclusion of the contract term including: an overview of project in relation to the treatment projects ongoing in the upperwatershed, analysis of monitoring data, discussion of the successes or limitations of the contract year activities, recommendation for improvement of future project work.

g. Facilities and equipment

The Nez Perce SWCD will provide office space and administrative support for the technical position filled through this contract. The SWCD will also provide support for accounting needs and district wide information and education functions. The U.S. Natural Resources Conservation Service provides technical advice, field vehicles, and field equipment for use by the district. Monitoring equipment and technical support will be supplied through the Clearwater Focus Program (CFP) and the Idaho Soil Conservation Commission. Specialized and earth moving equipment for BMP construction or placement, etc. will be provided by the subcontractors selected.

h. Budget

The increase in the Fiscal Year 2000 budget request is for: 1) Increase for BMPs implementation reflecting efficiency improvement from start-up year. 2) Ability to hire a technician during the three to four month implementation phase. 3) Projected NEPA and ESA costs.

Section 9. Key personnel

**Lynn Rassmussen, Natural Resources Conservation Service
District Conservationist (1FTE)**

Education:

M.S. Soil Science and Water Quality, University of Idaho, 1997
M.S. Crop Science, University of Idaho, 1989

Associations:

Soil and Water Conservation Society; Agronomy Society of America; and International Erosion Control Association.

Employment History-Natural Resources Conservation Service (USDA):

District Conservationist 2 years, Lewiston, ID
Watershed Enhancement Program 2.5 years, Moscow, ID
Conservationist, 5 years, Moscow, ID

Completed Projects Relative to the Proposed Project:

60 Agricultural conservation contracts; 17 stream bank and fisheries stabilization project documents; Assessment and evaluation of BMPs for fisheries improvement/protection effectiveness; structural design 900 plans;
Various responsibilities for 9 watershed improvement planning documents.

**Cheryl Hart, Nez Perce Soil and Water Conservation District
Administrative Assistant/Public Outreach Specialist
(1FTE)**

Employment History:

1991-Present: Nez Perce SWCD, Administrative Assistant and Public Outreach Specialist. Administer payments to landowners for state agriculture contracts; Perform accounting and administrative functions for all SWCD programs, including financial statements and tax reporting obligations; Coordinate monthly SWCD Board meetings and all public meetings; Write, publish, and distribute 16 newsletters per year; Responsible for reporting obligations to Idaho Division of Environmental Quality, the Idaho Soil Conservation Commission, and U.S. Environmental Protection Agency; Prepare and present public outreach presentations and workshops; Assist ISCC and NRCS staff.

**Janet Hohle, Idaho Soil Conservation Commission
Clearwater Subbasin Focus Program Co-coordinator (1 FTE)**

Education

Institution	Location	Attendance	Major	Degrees
Washington State University	Pullman, WA	6/92-8/94	Education	Ed.M
University of Idaho	Moscow, ID	1-6/92; 5/94	Education	n/a
University of Washington	Seattle, WA	1/77 - 8/78	Geology	B.S.
University of Iowa	Iowa City, IA	1971-1975 (52 hrs)	General	n/a

Certificates: Idaho: All subjects grades 1-8; Washington: Elementary education grades K-8 ; Earth Science Endorsement grades 4-12.

Professional Organizations: National Council Teachers of Mathematics; Phi Delta Kappa; Washington Science Teachers Association; Soil and Water Conservation Society.

Employment History

May, 1997 to Present Clearwater Subbasin Focus Program Co-coordinator Idaho Soil Conservation Commission. Moscow, Idaho. Duties: Analyze programs, laws, policies related to watershed planning and restoration work. Work with local groups to facilitate development of projects for fisheries habitat restoration that maximize available agencies expertise, funding

availability, and importance to fish. Prepare documents for watershed habitat work coordination. Give educational presentations and workshops for watershed management and proposal development. Provide technical assistance to project proponents with proposal development, implementation, compliance with NEPA and the ESA, monitoring, and assessment. Coordinate information and education outreach for projects coordinated through Clearwater Focus Program.

March, 1996 to May, 1997 Mineral/Aggregate Specialist Oregon State Department of Land Conservation and Development. Salem, Oregon.

1994-1996 Teacher Summer school science teacher-Upward Bound, University of Idaho. Substitute teacher in grades 4-12 in Idaho and Washington school districts.

April, 1985 to November, 1991 Geology Department Director Colville Confederated Tribes. Nespelem, Washington.

April, 1982 to April, 1985 Mineral Analyst Colville Confederated Tribes. Keller, Washington.

January, 1979 to April, 1982 Geologist Colville Confederated Tribes. Nespelem, Washington.

The co-coordinator has extensive professional experience with interdisciplinary resource management, development, and problem solving in areas with multiple jurisdictional issues associated. During her tenure with Colville Confederated Tribes, the co-coordinator was responsible for competitive federal contracting. Demonstrated expertise includes resource issue coordination, public education, communication, and systems analysis.

Relevant Job Completions: 1) Data base compilations for system planning in the Clearwater River subbasin; 2) Coordinated and prepared FY1999 project proposals; coordinated program planning; 3) Legal interpretation and application of new Oregon State Administrative Rule for Goal 5 (natural) resources; and presented statewide training workshops to train county and state personnel; 4) Mineral exploration and Development system design and implementation on the Colville Indian Reservation; 5) International mineral marketing campaign for the Colville Tribes Mount Tolman ore body.

These three positions will function as support for the Nichols Canyon subwatershed habitat project. The Nez Perce SWCD will hire a conservationist to implement the project. Project oversight will come from the Clearwater Focus Program.

Section 10. Information/technology transfer

A status report will be published in each of the 12 Nez Perce Soil and Water Conservation District newsletters during Fiscal Year 2000. In conjunction with the Clearwater Focus Program (CFP), at least one workshop will be presented to illustrate goals for fisheries habitat improvement in the watershed and highlight work completed. Through status and summary reports, the project will be incorporated into the CFP subbasin-wide newsletter. During final BMP design work, efforts to recruit school and community groups to participate in implementation will be made. At least one project tour will be lead by the Nez Perce SWCD. Through the CFP at least two project reviews will be presented to the U.S Natural Resources Division II management team meeting and at least two reviews will be presented to the water quality basin advisory group working on the TMDL process through the Idaho Department of Environmental Quality's north central office.

Congratulations!